Amendments to the Claims

Please amend claims 1, 20, 26, and add new claims 41-43 as indicated below. All claims are listed below, with amended claims so marked. This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for a proxy to transparently provide access to resources of a resource manager, comprising:

receiving from the client a resource locator for retrieving a resource of a selected resource manager of a set of ~~the~~ resource managers disposed within different machines, wherein the resource locator comprises a network address of the resource manager and the resource locator is at least partially obscured to hide the network address;

~~validating client authorization to access the resource;~~

de-obscuring the resource locator;

retrieving a first portion of the resource from the resource manager according to the de-obscured resource locator, and a second portion of the resource from a second selected resource manager of said set of resource managers according to the de-obscured resource locator; and

providing the resource to the client such that it appears to have originated from the proxy.

2. (Original) The method of claim 1, wherein the proxy comprises a front end manager and a back end manager, the method further comprising:

receiving a first proxy header corresponding to the request, the first proxy header identifying the client as the source of the request and the front end manager as the source of the resource; and

preparing a second proxy header by rewriting the first proxy header so as to substitute the back end manager for the client, and the resource manager for the front end manager;

wherein retrieving the resource from the resource manager comprises the back end manager providing the second proxy header to the resource manager.

3. (Original) The method of claim 1, further comprising:

receiving a first proxy header corresponding to the request, the first proxy header identifying the client as the source of the request and the proxy as the source of the resource; and

preparing a second proxy header by rewriting the first proxy header so as to substitute the proxy for the client, and the resource manager for the proxy;

wherein retrieving the resource from the resource manager comprises providing the second proxy header to the resource manager.

4. (Original) The method of claim 3, further comprising:

receiving a third proxy header from the resource manager, the third proxy header identifying the resource manager as the source of the resource, and the proxy as the recipient of the resource; and

preparing a fourth proxy header by rewriting the third proxy header so as to substitute the proxy as the source of the resource, and the client as the recipient of the resource;

wherein providing the resource to the client comprises providing the fourth proxy header to the client.

5. (Previously Presented) The method of claim 3, wherein the resource is formatted according to a tag based language.

6. (Previously Presented) The method of claim 5, wherein the tag based language is a selected one of: the HyperText Markup Language (HTML), and the eXtensible Markup Language (XML).

7. (Original) The method of claim 3, wherein the first proxy header comprises a content type identifier identifying a desired format for the resource, and wherein the resource manager stores the resource in a second format different from the desired format, the method further comprising:

converting the resource from the second format to the first format.

8. (Original) The method of claim 1, further comprising:

receiving a content type identifier from the client identifying a desired format in which to provide the resource to the client; and

converting the resource from a different format utilized by the resource manager into the desired format.

9. (Original) The method of claim 1, wherein the network comprises multiple resource managers providing access to the resource, the method further comprising:

retrieving portions of the resource from selected ones of the multiple resource managers.

10. (Original) The method of claim 9, wherein the portions are retrieved in parallel from the selected ones of the multiple resource managers.

11. (Original) The method of claim 10, further comprising:

determining loads for the multiple resource managers; and

selecting among the multiple resource managers according to the loads.

12. (Original) The method of claim 11, wherein the portions are non-overlapping portions of the resource.

13. (Original) The method of claim 1, further comprising:

the resource locator comprising a Uniform Resource Locator (URL); and

inspecting the URL for a path component indicating the URL comprises the at least partially obscured portion.

14. (Original) The method of claim 1, wherein de-obscuring the resource locator comprises providing at least the obscured portion of the resource locator to a location manager, and receiving a de-obscured identifier responsive thereto.

15. (Original) The method of claim 14, wherein the location manager performs the validating client authorization to access the resource.

16. (Original) The method of claim 1, wherein validating client authorization to access the resource comprises providing the at least partially obscured portion of the resource locator, and an identity identifier for the client to an authorization manager.

17. (Original) The method of claim 1, wherein validating client authorization to access the resource comprises:

hash-encoding an identity value associated with the client; and

providing the hash-encoded identity value and at least a portion of the resource locator to an authorization manager configured to look up the hash-encoded identity value and the at least a portion of the resource locator in an access control table.

18. (Original) The method of claim 1, wherein the client communicates with the proxy by way of an Internet browser.

19. (Original) The method of claim 1, wherein the proxy comprises a front end manager and a back end manager, wherein the client only communicates with the front end manager for obtaining the resource, and wherein the back end manager obtains the resource from the resource manager.

20. (Currently Amended) A system, comprising:

a network communicatively coupling a client, a resource manager providing access to its resources, and a proxy comprising a front end manager and a back end manager, wherein the proxy is configured to perform a method comprising:

receiving from the client a resource locator for retrieving a resource of a selected resource manager of a set of ~~the~~ resource managers disposed within different machines, wherein the resource locator comprises a network address of the resource manager and the resource locator is at least partially obscured to hide the network address;

~~validating client authorization to access the resource;~~

de-obscuring the resource locator;

retrieving a first portion of the resource from the resource manager according to the de-obscured resource locator, and a second portion of the resource from a second selected resource manager of said set of resource managers according to the de-obscured resource locator; and

providing the resource to the client such that it appears to have originated from the proxy.

21. (Original) The system of claim 20, wherein the proxy is further configured to perform:

receiving a first proxy header corresponding to the request, the first proxy header identifying the client as the source of the request and the proxy as the source of the resource; and

preparing a second proxy header by rewriting the first proxy header so as to substitute the proxy for the client, and the resource manager for the proxy;

wherein retrieving the resource from the resource manager comprises providing the second proxy header to the resource manager.

22. (Original) The system of claim 21, wherein the proxy is further configured to perform:

receiving a third proxy header from the resource manager, the third proxy header identifying the resource manager as the source of the resource, and the proxy as the recipient of the resource; and

preparing a fourth proxy header by rewriting the third proxy header so as to substitute the proxy as the source of the resource, and the client as the recipient of the resource;

wherein providing the resource to the client comprises providing the fourth proxy header to the client.

23. (Original) The system of claim 20, wherein the resource locator comprises a Uniform Resource Locator (URL), and wherein the proxy is further configured to perform:

inspecting the URL for a path component indicating the URL comprises the at least partially obscured portion.

24. (Original) The system of claim 20, wherein validating client authorization to access the resource comprises:

hash-encoding an identity value associated with the client; and

providing the hash-encoded identity value and at least a portion of the resource locator to an authorization manager configured to look up the hash-encoded identity value and the at least a portion of the resource locator in an access control table.

25. (Original) The system of claim 20, wherein the client communicates with the proxy by way of an Internet browser.

26. (Currently Amended) A machine accessible medium having instructions encoded thereon, which when executed by at least one processor, are capable of directing the at least one processor to perform:

receiving from a client a resource locator for retrieving a resource of a resource manager, wherein the resource locator comprises a network address of a selected resource manager of a set of ~~the~~ resource managers disposed within different machines and the resource locator is at least partially obscured to hide the network address;

~~validating client authorization to access the resource;~~

de-obscuring the resource locator;

retrieving a first portion of the resource from the resource manager according to the de-obscured resource locator, and a second portion of the resource from a second selected resource manager of said set of resource managers according to the de-obscured resource locator; and

providing the resource to the client such that it appears to have originated from the proxy.

27. (Original) The medium of claim 26, wherein the proxy comprises a front end manager and a back end manager, and wherein the instructions comprise further instructions capable of directing the at least one processor to perform:

receiving a first proxy header corresponding to the request, the first proxy header identifying the client as the source of the request and the front end manager as the source of the resource; and

preparing a second proxy header by rewriting the first proxy header so as to substitute the back end manager for the client, and the resource manager for the front end manager;

wherein retrieving the resource from the resource manager comprises the back end manager providing the second proxy header to the resource manager.

28. (Original) The medium of claim 26, wherein the instructions comprise further instructions capable of directing the at least one processor to perform:

receiving a first proxy header corresponding to the request, the first proxy header identifying the client as the source of the request and the proxy as the source of the resource; and

preparing a second proxy header by rewriting the first proxy header so as to substitute the proxy for the client, and the resource manager for the proxy;

wherein retrieving the resource from the resource manager comprises providing the second proxy header to the resource manager.

29. (Original) The medium of claim 28, wherein the instructions comprise further instructions capable of directing the at least one processor to perform:

receiving a third proxy header from the resource manager, the third proxy header identifying the resource manager as the source of the resource, and the proxy as the recipient of the resource;

preparing a fourth proxy header by rewriting the third proxy header so as to substitute the proxy as the source of the resource, and the client as the recipient of the resource; and

wherein providing the resource to the client comprises providing the fourth proxy header to the client.

30. (Previously Presented) The medium of claim 28, wherein the resource is formatted according to a tag based language.

31. (Previously Presented) The medium of claim 30, wherein the tag based language is a selected one of: the HyperText Markup Language (HTML), and the eXtensible Markup Language (XML).

32. (Original) The medium of claim 28, wherein the first proxy header comprises a content type identifier identifying a desired format for the resource, and wherein the resource manager stores the resource in a second format different from the desired format, wherein the instructions comprise further instructions capable of directing the at least one processor to perform:

converting the resource from the second format to the first format.

33. (Original) The medium of claim 26, wherein the instructions comprise further instructions capable of directing the at least one processor to perform:

receiving a content type identifier from the client identifying a desired format in which to provide the resource to the client; and

converting the resource from a different format utilized by the resource manager into the desired format.

34. (Original) The medium of claim 26, wherein the network comprises multiple resource managers providing access to the resource, and wherein the instructions comprise further instructions capable of directing the at least one processor to perform:

retrieving portions of the resource from selected ones of the multiple resource managers.

35. (Original) The medium of claim 34, wherein the portions are retrieved in parallel from the selected ones of the multiple resource managers.

36. (Original) The medium of claim 35, wherein the instructions comprise further instructions capable of directing the at least one processor to perform:

determining loads for the multiple resource managers; and

selecting among the multiple resource managers according to the loads.

37. (Original) The medium of claim 36, wherein the portions are non-overlapping portions of the resource.

38. (Original) The medium of claim 26, wherein the instructions comprise further instructions capable of directing the at least one processor to perform:

the resource locator comprising a Uniform Resource Locator (URL); and

inspecting the URL for a path component indicating the URL comprises the at least partially obscured portion.

39. (Original) The medium of claim 26, wherein the instructions for validating client authorization to access the resource comprise instructions capable of directing the at least one processor to perform:

hash-encoding an identity value associated with the client; and

providing the hash-encoded identity value and at least a portion of the resource locator to an authorization manager configured to look up the hash-encoded identity value and the at least a portion of the resource locator in an access control table.

40. (Previously Presented) The medium of claim 26, wherein the client communicates with the proxy by way of an Internet browser.

41. (New) The method of claim 1, wherein said providing the resource to the client comprises transcoding at least a portion of said retrieved resource received in a first format into a different second format.

42. (New) A method for a proxy to transparently provide access to resources of a resource manager, comprising:

receiving from the client a resource locator for retrieving a resource from selected ones of resource managers disposed within different machines, wherein the resource locator comprises a network address identifying at least one of the resource managers, and the resource locator being at least partially obscured to hide the network address;

validating client authorization to have the resource locator de-obscured, and if so, de-obscuring the resource locator;

retrieving the resource from said selected ones of said resource managers according to the de-obscured resource locator, said resource having at least a portion encoded in a first format.

43. (New) The method of claim 41, further comprising:

transcoding at least the portion in the first format into a different second format.